31 ((granul\$5 and (photocataly\$3 or "photo-cataly\$3) and granul\$5 same (mm or millimeter)) and (silica or "sio.sub.2") US-PGPUB; EFO; JPO; DERWENT; IBM TDB US-PGPUB US-PGPUB; IBM TDB US-PGPUB US-PG	L Number	Hits	Search Text	DB	Time stamp
"photo-cataly**3]) and granul\$5 same (mm or millimeter)) and (silica or "sio.sub.2") SP-GPUB; SPO, JPO; DERMENT; TEM TDB				USPAT;	2004/06/01 04:40
	1		"photo-cataly"\$3)) and granul\$5 same (mm	US-PGPUB;	i e
1343				EPO; JPO;	
1316 (502/239,242,250,251,263,232,237,350,527.14 SEPATR, 5,27. 24000005/31 20:32 SEPATR, 5,27. 2400005/31 20:32 SEPATR, 500005/31 20:32 SEPATR, 500005/			"sio.sub.2")	DERWENT;	1
1343			·	IBM TDB	
1343	11	2316	(502/239.242.250.251,263,232,237,350,527.14	5725 PAIC 6, 527.	22000008/01 05:20
1964 (502/239,242,250,251,263).T4,180).CCLS. USPAT; USPGPUB USPAT; USPGPUB USPAT; USPGPUB USPAT; USPGPUB USPAT; USPGPUB USPAT; USPAT; USPGPUB USPAT;	1		, , , , , , , , , , , , , , , , , , , ,		
1964 (502/239,242,250,251,263).CCLS.)	_	1343	(502/239,242,250,251,263).CCLS.	USPAT;	2004/05/31 20:32
Color			, , , , , , , , , , , , , , , , , , , ,	US-PGPUB	
G17	_	1964	(502/239,242,250,251,263,174,180).CCLS.	USPAT;	2003/01/16 17:10
(titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$5 - 24 (((502/239, 242, 250, 251, 263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) - 7 ((((502/239, 242, 250, 251, 263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 7 ((((502/239, 242, 250, 251, 263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 3 ((((502/239, 242, 250, 251, 263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) - ((((502/239, 242, 250, 251, 263). CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (s			,	US-PGPUB	
(titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst" or (photo adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst") or (silicon adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst") or (photo adj catalyst)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$\$ -	_	617	((502/239.242.250.251.263).CCLS.) and	USPAT;	2003/01/16 19:32
S20xide) and (silica or "sio.sub.2" or (silicon adj \$20xide)) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler 8 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 0 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$5 0 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (silica or "s		01,		US-PGPUB	
(silicon adj \$20xide)) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$5 - 24 (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (photo adj catalyst)) and granul\$5 - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or (photo adj catalyst)) and granul\$5 - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or (photocata					
3					
(titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 24 (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler - 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (silicon adj \$20x	_	3		USPAT:	2003/01/16 19:27
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Catalyst)) and granul\$5 (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or "photo-catalyst" or (photo adj catalyst)) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and (photocatalyst or (photo adj catalyst)) and (photocatalyst or (p					
- 24 (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst") or ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst") or "photo-catalyst" or (photo adj catalyst)) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler (USPAT; US-PGPUB \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (silic					
(titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (siiicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (siiicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (titanium adj \$20xide)) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (siiicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (titanium adj \$20xide)) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul55 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (photo adj catalyst))) and granul55 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or	1_	24		USPAT:	2003/01/17 09:46
\$20xide) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "cio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul55 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (silicon adj \$20xide)) and (silicon adj \$20xid	_				
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or "photo-catalyst" or (photo adj catalyst)) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul55 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or (silicon adj \$20xide)))					
Catalyst)					
- ((((502/239,242,250,251,263).CCLS.) and (titania or "tio. sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio. sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj \$20xide)) and (silica or "sio. sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio. sub.2" or (fitanium adj \$20xide)) and (silica or "sio. sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio. sub.2" or (titanium adj \$20xide)) and (silica or "sio. sub.2" or (silicon adj \$20xide))) and (photocatalyst or (silicon adj \$20xide)))					
(titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul55 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or (silicon adj \$20xide)))		,		IISPAT.	2003/01/16 19:24
\$20xide) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler	-	·			2003/01/10 13:24
(silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 6 (colloidal adj silica) with "is silica" uspAT; uspA				03-10105	ŀ
or "photo-catalyst" or (photo adj catalyst)) and filler (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and filler (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst) USPAT; USPAT; USPGPUB USPAT; USPGPUB USPAT; USPGPUB (USPAT; USPGPUB USPAT; USPGPUB (USPAT; USPAT; U					1
catalyst)) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 (colloidal adj silica) with "is silica" with (diameter or size) ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst) 2003/01/17 07:45 USPAT; US-PGPUB (SPAT; US-PGPUB (SPAT; US-PGPUB (SPAT; US-PGPUB (SPAT; US-PGPUB) (SPAT; US-PGPUB) (SPAT; US-PGPUB) (SPAT; US-PGPUB) (SPAT; US-PGPUB)					
Total					1
(titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silican adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 ((colloidal adj silica) with "is silica" us-FGPUB with (diameter or size) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide))) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst us-FGPUB		_		HODAM.	2002/01/17 07-44
\$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide))) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" usth (diameter or size) ((((502/239,242,250,251,263).CCLS.)) and (USPAT; US-PGPUB ((((502/239,242,250,251,263).CCLS.))) and (USPAT; US-PGPUB (((silicon adj \$20xide)))) and (photocatalyst) - (silicon adj \$20xide))) and (photocatalyst)	-	·			2003/01/1/ 07:44
(silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and filler ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide))) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul85 8 (colloidal adj silica) with "is silica" US-PGPUB ((((502/239,242,250,251,263).CCLS.)) and (USPAT; US-PGPUB ((titania or "tio.sub.2" or (titanium adj \$20xide))) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst)				US-PGPUB	i
or "photo-catalyst" or (photo adj catalyst)) and filler (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 8 (colloidal adj silica) with "is silica" with (diameter or size) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst)					ļ
- 3 (catalyst)) and filler (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 - 8 (colloidal adj silica) with "is silica" with (diameter or size) (((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst)					ì
- 3 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2cxide)) and (silica or "sio.sub.2" or (silicon adj \$2cxide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst)) and granul\$5	1				
(titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 8 (colloidal adj silica) with "is silica" with (diameter or size) 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst) US-PGPUB USPAT; US-PGPUB US-PGPUB		_		manam.	2002/01/17 07:46
\$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst or "photo-catalyst" or (photo adj catalyst))) and granul\$5 (colloidal adj silica) with "is silica" us-PGFUB us-PGFUB ((((502/239,242,250,251,263).CCLS.)) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide))) and (photocatalyst) \$2003/01/17 07:45	-	3			2003/01/1/ 07:46
(silicon adj \$20xide))) and (photocatalyst or "photo-catalyst") and granul\$5 - 8 (colloidal adj silica) with "is silica" USPAT; US-PGPUB USPAT; ((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$20xide)) and (silica or "sio.sub.2" or (silicon adj \$20xide)) and (photocatalyst US-PGPUB				US-PGPUB	
or "photo-catalyst" or (photo adj catalyst)) and granul\$5 -					:
- (catalyst)) and granul\$5 (colloidal adj silica) with "is silica" USPAT; US-PGPUB ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst) Catalyst)) and granul\$5 USPAT; US-PGPUB 2003/01/17 07:45 US-PGPUB 2003/01/17 2003/01/17 2003/01/17 200					
- 8 (colloidal adj silica) with "is silica" USPAT; US-PGPUB \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst				1	
with (diameter or size) ((((502/239,242,250,251,263).CCLS.) and (USPAT; (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst		_		HCDAM.	2002/01/16 10:22
- 7 ((((502/239,242,250,251,263).CCLS.) and (titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide)) and (photocatalyst	-	8			2003/01/10 19:33
(titania or "tio.sub.2" or (titanium adj \$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst		-			2002/01/17 07:45
\$2oxide)) and (silica or "sio.sub.2" or (silicon adj \$2oxide))) and (photocatalyst	-	1 '			2003/01/1/ 0/:45
(silicon adj \$2oxide))) and (photocatalyst				02-LGEOR	
or "pnoto-catalyst" or (pnoto ad]					
catalyst))) and filler		_	catalyst))) and filler	mann.	2002/01/17 07 47
	-	3	((((502/239,242,250,251,263).CCLS.) and		2003/01/17 07:47
(titania or "tio.sub.2" or (titanium adj US-PGPUB				US-PGPUB	
\$20xide)) and (silica or "sio.sub.2" or					
(silicon adj \$20xide))) and (photocatalyst			(Silicon adj \$20xide))) and (photocatalyst		
or "photo-catalyst" or (photo adj					
catalyst))) and granul\$5		_		l	
	-	3			2003/01/17 07:48
(titania or "tio.sub.2" or (titanium adj US-PGPUB				US-PGPUB	
\$20xide)) and (silica or "sio.sub.2" or					
(silicon adj \$20xide))) and (photocatalyst					
or "photo-catalyst" or (photo adj				1	
	ì	L	catalyst))) and granul\$5) and mix\$5	<u> </u>	

- "	3	((((((502/239,242,250,251,263).CCLS.) and	USPAT;	2003/01/17 09:43
		(titania or "tio.sub.2" or (titanium adj	US-PGPUB	
		\$20xide)) and (silica or "sio.sub.2" or		
		(silicon adj \$2oxide))) and (photocatalyst		
		or "photo-catalyst" or (photo adj		
		catalyst))) and granul\$5) and mix\$5) and		
1		titani\$2 with silica		
-	3		USPAT;	2003/01/17 09:46
		(titania or "tio.sub.2" or (titanium adj	US-PGPUB	
	1	\$2oxide)) and (silica or "sio.sub.2" or		
1		(silicon adj \$2oxide))) and (photocatalyst		
		or "photo-catalyst" or (photo adj		
		catalyst))) and filler) and silica with		1
	1	(size\$1 or diameter\$1 or radius)		
-	3	(((((ool) = oo) = ool =	USPAT;	2003/01/17 09:47
1		(titania or "tio.sub.2" or (titanium adj	US-PGPUB	
		\$20xide)) and (silica or "sio.sub.2" or		
		(silicon adj \$20xide))) and (photocatalyst		1
	1	or "photo-catalyst" or (photo adj		
	1	catalyst))) and filler) and silica with		
f_		(size\$1 or diameter\$1 or radius or nm)		
17	24		USPAT;	2003/01/17 09:47
1		(titania or "tio.sub.2" or (titanium adj	US-PGPUB	
1	1	\$20xide)) and (silica or "sio.sub.2" or		
1		(silicon adj \$20xide))) and (photocatalyst		
1		or "photo-catalyst" or (photo adj		
1_	10	catalyst))	l	1
-	10		USPAT;	2003/01/17 10:33
		(titania or "tio.sub.2" or (titanium adj	US-PGPUB	
1	l	\$20xide)) and (silica or "sio.sub.2" or		
		(silicon adj \$20xide))) and (photocatalyst]
		or "photo-catalyst" or (photo adj		
1		catalyst))) and silica with (size\$1 or]
_	11	diameter\$1 or radius or nm) ("9700134").PN.	EDO. 770	0002/01/22 20 21
1	1 11	()/OUIST).FN.	EPO; JPO;	2003/01/17 10:34
	1		DERWENT;	
l -	2071	(502/239,242,250,251,263,232,237,350).CCLs.	IBM_TDB	2004/06/01 05 10
	20/1	(302/235/232/230/231/203/232/237,330).CCLS.	USPAT; US-PGPUB	2004/06/01 05:19
1 -	23	((502/239,242,250,251,263,232,237,350).CCLS		2004/05/21 20:22
	"	and granul\$5 and (photocataly\$3 or	US-PGPUB	2004/05/31 20:37
		"photo-cataly"\$3)	US-FGFUB	
-	3	(((502/239,242,250,251,263,232,237,350).CCL	EIRDAT.	2004/06/01 04:15
1	1	and granul\$5 and (photocataly\$3 or	US-PGPUB	2004/00/01 04:15
		"photo-cataly"\$3)) and cylind\$5 with	OO-FGFUB	
-	571	ghap@1\$5 and (photocataly\$3 or	USPAT;	2004/06/01 02:55
		"photo-cataly"\$3)	US-PGPUB;	2004/00/01 02:33
1]		EPO; JPO;	
	1		DERWENT;	
			IBM TDB	,
	45	(granul\$5 and (photocataly\$3 or	USPAT;	2004/05/31 20:39
1		"photo-cataly"\$3)) and cylind\$5 with	US-PGPUB;	
		shap\$3	EPO; JPO;	
		-	DERWENT;	
			IBM TDB	
-	15	((granul\$5 and (photocataly\$3 or	USPĀT;	2004/05/31 20:39
		"photo-cataly"\$3)) and cylind\$5 with	US-PGPUB;	
		shap\$3) and silica with (particle or	EPO; JPO;	
		particulate)	DERWENT;	
			IBM TDB	
-	236	(granul\$5 and (photocataly\$3 or	USPAT;	2004/05/31 20:40
		"photo-cataly"\$3)) and (cylind\$5 or tube	US-PGPUB;	
		or tubular or columnar)	EPO; JPO;]
			DERWENT;	ł
i i			IBM TDB	
-	152	((granul\$5 and (photocataly\$3 or	USPAT;	2004/05/31 20:39
	ľ	"photo-cataly"\$3)) and (cylind\$5 or tube	US-PGPUB;	
' I	·	or tubular or columnar)) and (silica or	EPO; JPO;	
		"sio.sub.2")	DERWENT;	
			IBM TDB	

-	85	(granu1\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (cylind\$5 or tube or tubular or columnar) same (shap\$3 or extru\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/05/31 20:40
-	63	(((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (cylind\$5 or tube or tubular or columnar)) and (silica or "sio.sub.2")) and (cylind\$5 or tube or tubular or columnar) same (shap\$3 or extru\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/31 20:41
-	67	(((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (cylind\$5 or tube or tubular or columnar)) and (silica or "sio.sub.2")) and (cylind\$5 or tube or tubular or columnar or rod) same (shap\$3 or extru\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/31 20:41
-	573	granul\$5 and (photocataly\$3 or "photo-cataly"\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 02:55
-	199	(granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (rod or cylind\$5 or columnar or tubular)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 02:56
_	122	((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (rod or cylind\$5 or columnar or tubular)) and silica	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 02:57
-	118	(((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and (rod or cylind\$5 or columnar or tubular)) and silica) and ("tio.sub.2" or titania or (titanium adj \$2oxide))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 02:59
-	11	((((granul\$5 and (photocataly\$3 or "photo-cataly\$3)) and (rod or cylind\$5 or columnar or tubular)) and silica) and ("tio.sub.2" or titania or (titanium adj \$20xide))) and granul\$5 with (mum or millimeter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/01 03:00
-	37	(granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and granul\$5 with (mm or millimeter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 03:51
-	37	(granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and granul\$5 with (mm or millimeter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 03:54
_	16	((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and granul\$5 with (mm or millimeter)) and (silica or "sio.sub.2")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 03:54
	61	(granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and granul\$5 same (mm or millimeter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 03:54
	31	((granul\$5 and (photocataly\$3 or "photo-cataly"\$3)) and granul\$5 same (mm or millimeter)) and (silica or "sio.sub.2")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2004/06/01 04:35